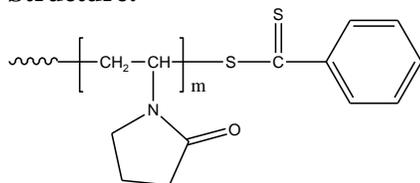


Sample Name: Poly (N-vinyl pyrrolidone)

Sample #: P18235A-NVP

Structure:

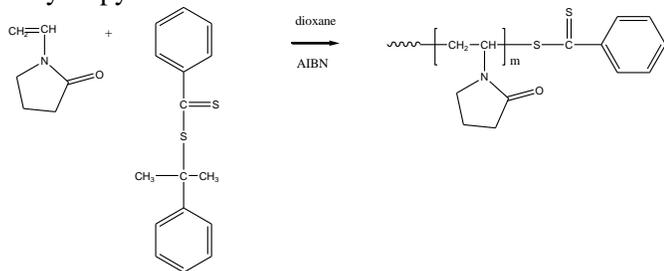


Composition:

Mn x 10 ³	Mw/Mn (PDI)
90.0	1.9

Synthesis Procedure:

Polymer is synthesized by RAFT polymerization of N-vinyl 2-pyrrolidinone:

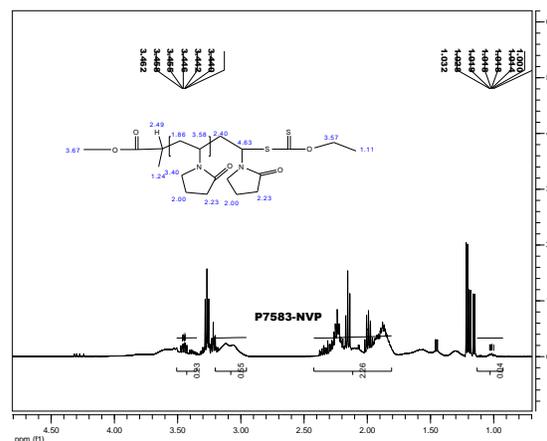


Characterization:

Polymer analyzed by size exclusion chromatography (SEC) to obtain the molecular weight and polydispersity index (PDI) using water containing 0.1M NaNO₃ and 0.01M NaH₂PO₄ as eluent. The Mn was calculated from ¹H-NMR spectroscopy by comparing the peak area of the terminal end groups protons at about 3.6 ppm and 1.2 ppm and of pyrrolidinone units at 3.2 ppm to 2.0 ppm polymer molecular weight distribution is determined by SEC.

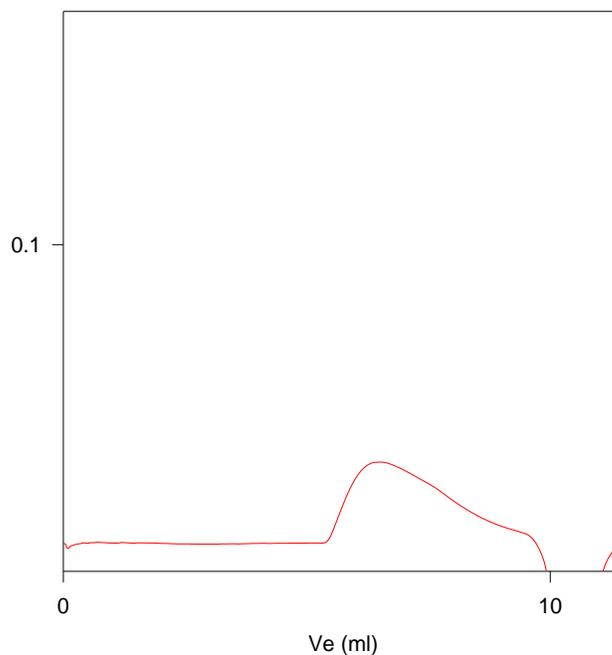
Solubility: Polymer is soluble in water.

¹H-NMR Spectrum of polymer bearing terminal Xanthate group:



SEC profile of the Sample :

P18235A-NVP



Size Exclusion Chromatography of Poly(N-vinylpyrrolidone)

M_n=90,000, M_w=171,000, PI=1.9